

Having trabeculectomy surgery for glaucoma

Department of Ophthalmology

Information for Patients

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What is glaucoma?

Glaucoma is a group of eye problems that damage the optic nerve. The optic nerve acts like an electric cable with over a million wires. It sends images from the eye to the brain. You might not notice symptoms early on but over time you can start to lose sight. Most people with glaucoma have high pressure in one or both eyes. Some people have a normal eye pressure yet start to get glaucoma. The pressure inside the eye is known as the intraocular pressure (IOP). It depends on the amount of fluid within the eye. There is no cure for glaucoma. Treatments can lower the IOP and slow down or help to stop loss of sight.

How is glaucoma treated?

1. Eye drops are the most common treatment
2. Some people need surgery to lower the pressure

What is a trabeculectomy?

A trabeculectomy is an operation to lower eye pressure.

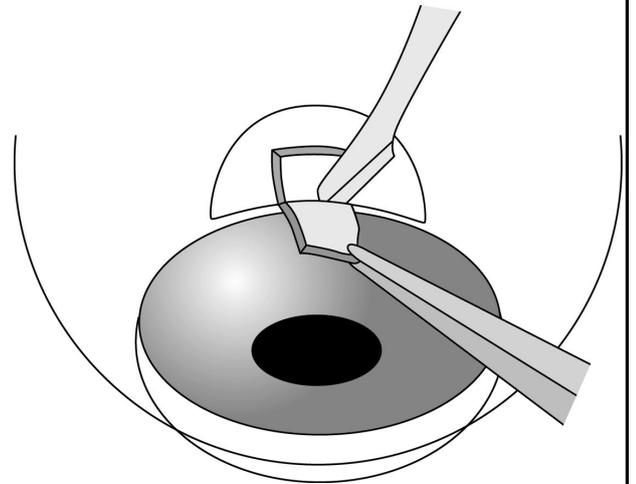
It will not bring back lost sight but can protect the sight you still have.

**Health information and support is available at www.nhs.uk
or call 111 for non-emergency medical advice**

Visit www.uhleicester.nhs.uk for maps and information about visiting Leicester's Hospitals
To give feedback about this information sheet, contact uhl-tr.informationforpatientsmailbox@nhs.net

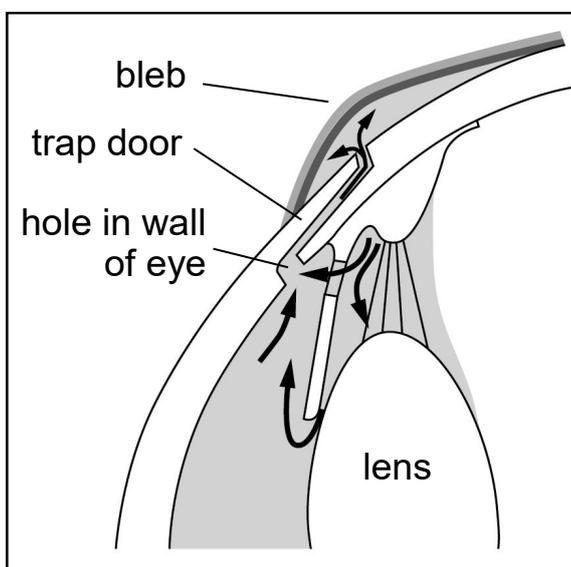
What happens during a trabeculotomy?

- A small hole is made in the wall of the eye (the sclera).
- Fluid (aqueous humour) drains out through this hole under a thin cover called a trap door.
- The draining fluid may cause the outer coat of the eye (conjunctiva) to swell. This swelling is known as a 'bleb'. It is usually hidden just under the upper eyelid.
- The fluid that leaves the eye is absorbed by other eye tissues.
- After an operation (or any trauma) the body forms scar tissue and heals. Scarring can be a problem after a trabeculectomy. If the trap door starts to scar and heal then it may stop fluid from leaving the eye. The pressure inside the eye may rise again.
- To help stop scarring we often use an 'anti-scarring' medicine during surgery (either mitomycin C or 5-fluorouracil). They are put onto the surface of the eye for 3 to 5 minutes during the operation, or given as injections after surgery.

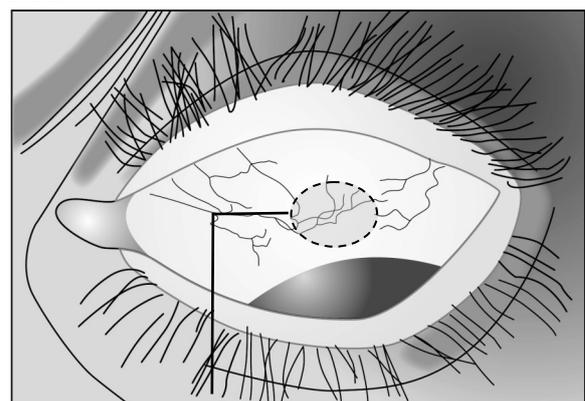


What can I expect during the operation?

- Most people do not need to stay in hospital overnight for the operation.
- Most people are awake during the surgery. We use a local anaesthetic to numb the eye and the surrounding area. This will be an injection around the eye.



Eye looking downwards with top eyelid raised



A trabeculectomy bleb

Depending on the person, sometimes a general anaesthetic is needed.

- The operation lasts about 45 minutes to 1 hour.

What happens after surgery?

- We put a clear plastic shield your eye to protect it from accidental knocks.
- You will be able to go home. You will be sent home with 2 sets of eye drops.
 1. an antibiotic eye drop (such as chloramphenicol). You need to use these every 2 hours during the day for the first 4 weeks
 2. an anti-inflammatory steroid eye drop (such as Dexamethasone or Pred Forte). These need to be used for several months to help stop scarring of the operation site.

We will explain this in detail after your surgery.

- These drops are usually all that is needed in the operated eye. Please remember to carry on using any eye drops you were using in your other eye.
- For the first few days, and sometimes weeks after the surgery, your eye may feel red and prickly, like something is in the eye. This is due to the surgery itself and sometimes the stitches that we use.
- It is also normal for the vision to be a little blurred. The discomfort and blurry vision should get better with each day after surgery.
- If you feel your vision is getting worse or the eye is becoming more uncomfortable please contact the hospital or go to Eye Casualty.
- You must come back the next day for an examination. At this examination we will take off the eye shield and check the eye pressure.

How often will I need to be seen in clinic for a follow-up?

The eye pressure can change after your operation. It is likely that you will need to visit the clinic once a week for the first month.

Sometimes changes to the bleb may be needed. For example, if the pressure in the eye is too high, we may need to take stitches may out (or break with a laser). Or we may ask you to massage the eye.

In the first few weeks after the operation we may also need to inject more anti-scarring medicines around the eye. If the scarring becomes very bad we may need to do a small operation to release the scar tissue.

It may take 2 to 3 months for the eye to feel completely normal. At this point, you will be able to have a glasses test. The operation may have changed your prescription.

What is the success rate of surgery?

Most people will have a low eye pressure without the need for any more glaucoma eye drops. The success rate depends on a number of risk factors. These include the type of glaucoma, previous surgery, age and ethnic background. In low risk patients the success rate is over 90%. In Leicester, almost 85% of patients have an eye pressure of less than 21 without eye drops 1 year after surgery. 75% of people have an eye pressure of less than 16. A normal eye pressure can be between 10 and 21.

What are the risks of surgery?

As with any operation there are risks but they are small. The main risks are that

- the pressure will stay too high or too low
- the eye becomes infected.

When the pressure is too high after surgery, this is usually because the trap door has become scarred and stuck down as the eye heals. Sometimes the pressure in the eye can be very good straight after surgery, but then can get worse again a few weeks or months (or even years) later.

Very low pressure, or a sudden drop in pressure, can lead to a bleed inside the eye (choroidal haemorrhage). This is a rare but very serious complication. If the pressure in your eye is very low you may need more surgery. This could include having the trap door tightened. Sometimes changing how often you use your eye drops can be enough.

It is uncommon (only 4% of patients) to return to theatre after surgery in Leicester because the pressure is too low.

The risk of serious bleeding or infection in the eye is uncommon (around 0.2% of the time) but can rarely lead to worse or even loss of vision.

Long-term risks

The long term risks of a trabeculectomy are infection, discomfort and developing a cataract.

- Infection

While the risk of infection after surgery is rare it may be serious. There is a very small risk that the bleb might become infected. If a patient who has had a trabeculectomy gets a red eye or conjunctivitis, it is important to have the eye looked at by an eye doctor.

- Discomfort

In some people the bleb can become large and lumpy. The bleb can push out the eyelid or cause the eyelid to be raised or droopy. It is common, in around 10% of patients, for a large bleb to cause a feeling of dry eye. In most, this is mild and does not need treatment. Lubricating eye drops may be needed. Sometimes the discomfort is more severe and surgery is needed to make the bleb smaller.

- Cataract

In patients who have not had cataract surgery there is a small risk that a trabeculectomy may make the cataract you already have worse.

What are the risks of not having surgery?

If your doctor is recommending a trabeculectomy, this means that your glaucoma is getting worse or the pressure is too high within your eye. If this is not treated then there is a risk of loss of vision which cannot be fixed.

What activities should I avoid after surgery?

- It is important to avoid energetic activity straight after you operation. This includes most sports such as swimming, jogging and contact sports.
- Avoid heavy lifting and bending in the weeks after surgery.
- Watching television, using a computer and reading will not harm the eye and can be continued without worry.
- If the IOP is very low your doctor may ask you to stop all activity until the pressure has increased.



When can I go back to work?

The length of time off work depends things like your job and the vision in your other eye. Office workers usually need 2 weeks off. If your job is physical or dusty you will need longer.

What happens once I'm on the waiting list for this surgery?

Before you have the operation you will need to have a pre-operative assessment with one of our eye nurses. This is usually done on the same day that you are having the surgery. It aims to find out if there are any problems with your general health that we need to think about when you come for the operation.

What to do if you have any concerns

If you want to discuss the procedure in more detail or have any other queries that cannot wait until your appointment, call the glaucoma specialist nurse on **07950 857406**.

If you think you may have a problem after your treatment call **Eye Casualty on 0116 258 6273**, or go to the **Eye Casualty Department**. It is in Windsor Eye Clinic, Level 1, Windsor Building, Leicester Royal Infirmary:

Opening times: Monday to Friday, 8.30am to 4.30pm

Saturday and Sunday, 8.30am to 12.30pm

If your problem happens outside of these hours and you feel that it is urgent, go to the main Emergency Department.

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔
على هذه المعلومات بلغة أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل

જો તમને અસ્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

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Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email uhl-tr.equalitymailbox@nhs.net

